

U.S. Patent Application No. 10/670,095  
Amendment dated August 25, 2004  
Reply to Office Action of May 25, 2004

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claims 1-11 (cancelled).

12. (currently amended) A composition comprising the polymer product of blending:

a) at least one polymer comprising acrylic units, vinyl units or both, and at least one ionic or ionizable group, wherein said ionic or ionizable group is a sulfonated group or a phosphonated group or both; and

b) at least one thermoplastic fluoropolymer, wherein a) and b) are different.

13. (original) The composition of claim 12, wherein said acrylic units or vinyl units are fluorinated.

14. (original) The composition of claim 12, wherein said at least one polymer is a copolymer.

15. (currently amended) A polymeric ion membrane comprising a polymer blend wherein said polymer blend comprises:

a) at least one acrylic or vinyl resin or both having at least one ionic or ionizable group, wherein said ionic or ionizable group is a sulfonated group or a phosphonated group or both; and

b) at least one thermoplastic fluoropolymer, wherein a) and b) are different.

16. (original) A membrane electrode assembly comprising the polymeric ion membrane of claim 15.

17. (original) A fuel cell comprising the membrane electrode assembly of claim 16.

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18. (previously presented) A fuel cell comprising anode and cathode compartments separated by the polymeric ionic exchange membrane of claim 15.

19. (original) The fuel cell of claim 18, wherein said membrane further comprises at least one filler.

20. (original) The fuel cell of claim 18, further comprising at least one porous support layer which is embedded in said membrane.

21. (original) The fuel cell of claim 18, wherein said fuel cell operates with a liquid hydrocarbon fuel.

22. (original) The fuel cell of claim 18, wherein the fuel cell operates with a methanol fuel.

23. (previously presented) A battery comprising anode and cathode compartments separated by the polymeric ionic exchange membrane of claim 15.

24. (currently amended) A method of making a the composition of claim 34 comprising:  
a) conducting a seed emulsion polymerization of a) at least one polymerizable monomer comprising acrylic or vinyl units in a dispersion of at least one fluoropolymer capable of dispersing in a medium.

25. (original) The method of claim 24, wherein said at least one fluoropolymer is a copolymer.

26. (original) The method of claim 24, wherein said fluoropolymer comprises poly(vinylidene fluoride).

27. (original) The method of claim 24, wherein said fluoropolymer comprises a) poly(vinylidene fluoride) and b) hexafluoropropylene, tetrafluoroethylene, chlorotetrafluoroethylene

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vinyl fluoride, or combinations thereof.

28. (original) The method of claim 24, wherein said fluoropolymer comprises a) from about 30 weight % to about 100 weight % of a poly(vinylidene fluoride) and from 0 weight % to about 70 weight % of at least one poly(alkylene) containing at least one fluorine atom.

29. (original) The method of claim 24, wherein said ionic or ionizable group is a sulfonated group or a phosphonated group or both.

30. (currently amended) A method of making a the composition of claim 12 comprising blending:

a) at least one polymer comprising acrylic units, vinyl units, or both and at least one ionic or ionizable group; and

b) at least one thermoplastic fluoropolymer, wherein a) and b) are different.

31. (original) The method of claim 30, wherein said blending is accomplished by melt or extrusion blending or solvent blending.

32. (original) The method of claim 30, wherein a) polymer is prepared by emulsion, bulk, or solution polymerization.

33. (cancelled).

34. (currently amended) A composition comprising the polymer product of polymerizing a) at least one polymerizable acrylic, or vinyl containing monomer, or both, and at least one monomer comprising at least one ionic or ionizable group, or both; b) in the presence of a dispersion of at least one fluoropolymer capable of dispersing in a medium, wherein said ionic or ionizable group is a sulfonated group or a phosphonated group or both.